Neighborhood Planning for Community Revitalization

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Transit Utilization in the East Harriet Neighborhood

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Transit Utilization in the East Harriet Neighborhood

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EXECUTIVE SUMMARY

This report addresses the issue of transit use in the East Harriet Neighborhood. It identifies major stakeholders in transit provision and summarizes diverse problems and expectations related to the delivery of services. Riders, non-riders, local businesses, bus drivers and the service provider, Metro Transit are all considered major stakeholders in the process of improved transit service delivery. Their views indicate a convergence of perspectives on bus service in the Metro area. Public transit is widely perceived as the less efficient, less convenient form of transport, when compared with the dominant mode, the private automobile. The different groups surveyed and interviewed also indicate a consensus that there is a sufficiently large market for public transit that could be tapped and served by Metro Transit if positive efforts were made in that direction. Some of these ideas come across in the interviews and other views expressed by the different stakeholders. They are, among others: improved efficiency of service, better information on programs and schedules and more imaginative, penetrative marketing. This study considers the issue of ridership and transit delivery to be an interactive process, and suggests ways for Metro Transit, the Neighborhood Association as well as the City of Minneapolis to play a role for better service delivery which will increase ridership and reduce automobile dependency. The main thrust of its recommendations therefore is on the importance of joint efforts by the different stakeholders who all stand to gain from improved services.

INTRODUCTION

This report addresses transport and related concerns of the residents of the East Harriet Farmstead Neighborhood Association (EHFNA). It is the product of research supported by the Neighborhood Planning for Community Revitalization (NPCR). The purpose of this research is multi-faceted. The basic nature of the inquiry was detailed as follows in the neighborhood's proposal to the NRP (Neighborhood Revitalization Program):

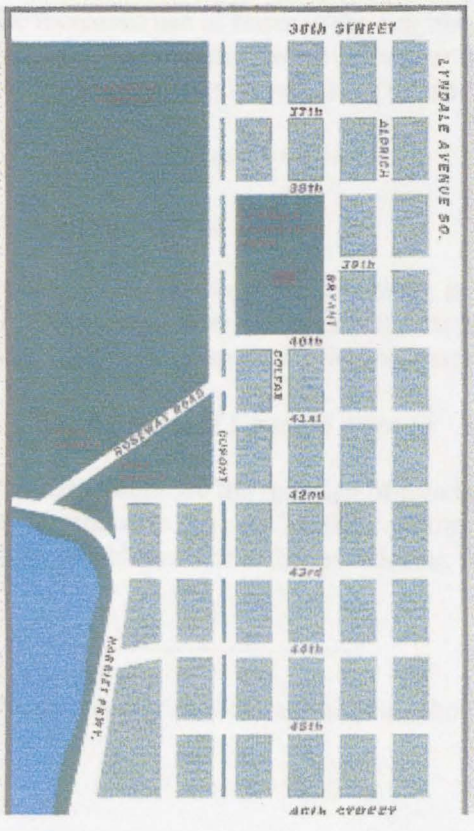
1. Increasing bus ridership in the neighborhood. This includes the exploration of alternative forms of transport, in order to reduce dependence on privately owned motor cars.
2. Finding viable solutions to the problems caused by the traffic and parking needs of the Walker Health Center.
3. Assessing the possible impacts of the changes to be brought about by the redesign of Lyndale Avenue

The report consists of surveys and interviews of various groups identified as stakeholders in an improved system of public transit. The views of these groups support an improvement of service delivery and consider the transit option a viable means of transportation.

Additionally, information is included on transport research including transportation policy and issues, and some of the solutions suggested to combat them. This information is intended to enable the Neighborhood Association to make decisions from an informed perspective.

THE NEIGHBORHOOD

The physical boundaries of the neighborhood are: Lyndale Ave. to the east, 36th St. to the north, 46th St. to the south, with Lake Harriet and the Lakewood Cemetery forming the western edge of this locality. Its most prominent and picturesque features: rose gardens, Lake Harriet and the cemetery are all on the western portion, which makes it livable and unique. The farmstead park is a popular venue for family and children's' activities and recreation and includes the Neighborhood Community Center.



The map at left shows the neighborhood's boundaries as well as its main physical features.

History, growth and profile of the neighborhood

The 1990 Census contains information on a cross section of the neighborhood. It includes information on the total population, the school enrollment, income levels and the commuting patterns of the residents. According to this data,

there is a 14% ridership for the entire neighborhood, while 14% of the residents do not have a vehicle. This provides an interesting contrast with the findings of the research conducted for this report[1].

The City Planning Profile contains details of some of the vital features of the area, which compare this neighborhood with the city as a whole. Some of its major findings are:

CATEGORY	EAST HARRIET NEIGHBORHOOD	MINNEAPOLIS
Total Population (1990)	3,872	368,383
Population Under 18	13.7%	20.6%
Families below Poverty Level	5.3%	13.5%
Percent of Single Family Homes	46.1%	43.3%
Median Value of Single Family Homes (1989)	$95,500	$69,900

Major transport concerns[2]

The fundamental aims of the neighborhood's planning efforts are to make the area a safer and more livable place for its residents and for visitors. This can be achieved in a number of ways, one of them being a reconfiguration of travel patterns of area residents. For these study issues, the following have been identified as requiring research and some form of resolution.

1. Increasing bus ridership and encouraging alternative modes of transport

The main issues are:

The increased use of buses in the neighborhood
Decreased dependence on the private single occupancy motor vehicle
Encouraging alternative modes of transport

2. The Walker Health Center

The main issues are:

Finding an alternative to parking along Bryant Ave. and other adjoining streets
Reducing the number of vehicles that come into the Walker campus area daily
Increasing parking space for Walker employees and visitors

3. The redesign of Lyndale Avenue

The main issues are the redesign of Lyndale Avenue, as the main artery that bounds this neighborhood to the east. Traffic calming devices are proposed in the plan for Lyndale Ave, which would have the effect of reducing the speed and the flow of traffic on that road. This could

[1] See results on p. 8
[2] Present bus service with route maps are shown in Appendix 5

increase the number of cars and other forms of traffic on parallel roads such as Aldrich and Bryant Ave.

TRANSPORTATION – SOME POLICY ISSUES

National, state and local transportation policy affects the design and livability of neighborhoods such as the one under study, through the allocation of dollars for freeway and other road construction, through the provision of funds for public transit programs, and through zoning and land use plans for residential areas.

Studies must take into account the context of interests that promote or oppose use of private vehicles. Hanson[3] reports that since 1969, there have been tremendous increases in the ownership of private cars, exerting considerable influence on the policy climate. Studies estimate that during this period, the number of privately owned vehicles has increased by 128%, compared with a mere 49% increase in the number of households. The number of households without a car has fallen significantly: from 21% in 1969 to just 9% in 1990. One has to consider the impact of these increases on urban planning and policy making, and the provision of roads and streets capable of coping with this increased traffic load.

The importance of transportation in the everyday economic life of the country can be gauged from figures showing personal consumption. In 1992 a total of $443.7 billion were spent on transportation, more than any other category except food and housing. Nearly 13 million workers in the US – about 11% of the workforce earn their living through the transportation sector. All of these people have a direct interest in transportation policies.

Because of the overwhelming preponderance of the automobile in the US, policy tends to be biased in favor of the private car driver. Due to the advantages and conveniences of driving one's own car, public transit modes have difficulty competing.

Transit is only a minor contributor to mobility in US cities. Studies estimate that in 1990, only 2.5% of all person trips were made by transit, while 86% were made by auto during the same period[4]. Central city transit use is a little higher: 6.2% of all work trips and 40% of downtown work trips were undertaken by transit[5].

The "new urbanism" approach to urban planning and design attempts to create neighborhoods that are livable for residents. There is an increasing shift towards planning and landscaping for transit as well as for other alternative transport forms[6]. Writers cite the examples of some European countries, notably Holland, where a new type of street, known locally as a *woonerf* (translated approximately as 'walking street') are transforming the urban landscape[7]. The *woonerf* is designed to allow maximum pedestrian use, making a residential neighborhood quieter and safer for children. Increasing the obstacles (speed bumps and other traffic calming devices) for through vehicular traffic can do this fairly effectively.

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[3] 'The Geography of Urban Transportation', Hanson, S., ed. New York: Guilford Press, 1995.
[4] US Dept. of Transportation figures, quoted in Hanson, 1995.
[5] Hanson, 1995.
[6] Cited in "Livable Streets", Appleyard, D., UC Press, Berkeley, 1981.
[7] Appleyard, 1981.

Overall, considering the costs of driving and the advantages of transit to cities, there can be significant savings for urban residents in terms of environment, pollution, resources, etc. with the use of transit[8].

SURVEYS AND INTERVIEWS

Aspects of public policy such as transit and transportation modes require the feedback and active support of the different participants and stakeholders in the process of service delivery and planning. Some of the stakeholder groups identified are riders, non-riders, bus drivers, Metro Transit planning and marketing staff, and the City planning and development staff. Views of most of these groups have been solicited, in order to ascertain the quality, level and the suitability of service provision. MT has itself conducted surveys and focus group meetings of non-riders, and EHFNA has conducted surveys of residents of the neighborhood. These exercises show a fairly broad spectrum of views, which however coalesce on some familiar topics and themes. Some of the results are given below to show the range of views and the degree of public feeling about the services currently on offer by MT.

EHFNA residents survey

A survey instrument was created by EHFNA and mailed to 1500 residents of the neighborhood, soliciting their views on ridership and public transit service delivery[9]. There were no biases in sample size selection: a mailing list of all neighborhood households was used by EHFNA. There was however an incentive of free bus passes worth $4, for each response generated. It is possible that this offer skewed the response tendency towards present bus users, which may give EHFNA ridership figures higher than the average for the Twin Cities. A total of 415 people responded, giving a response rate of just under 28%. Their responses are tabulated as follows:

Table 1

Details about the respondents:

Answers to the questions about ownership of home and access to an automobile.

QUESTION/ ISSUE	RESPONDENTS	PERCENTAGE
Home ownership		
Total	413	100
Own	274	66.3
Rent	142	34.4
Access to car		
Total	414	100
Yes	366	88.4
No	48	11.6

Table 2

[8] See studies cited in Appendix 4
[9] Appendix 1

Bus ridership: frequency of bus use in the neighborhood.

Question on the frequency of bus use contained several response options. Additionally, respondents were asked why they did not use the bus.

QUESTION/ ISSUE	RESPONDENTS	PERCENTAGE
Bus use		
Total	414	100
Every day	96	23.2
Several times a week	57	13.8
Once a week	9	2.2
Several times a month	34	8.2
Once a month or less	111	26.8
Never	108	26.1
If never; why not		
Total	151	100
It is not necessary	54	35.8
Not convenient to home	5	3.3
Not convenient to work	38	25.2
Does not work with sch.	37	24.5
Lack of info. on schedules	23	15.2
Other	38	25.2

About 37% of the respondents use the bus several times or more per week. However, an equally significant number, 26%, never use it, and an equal number use it only once a month. These figures are much lower than the findings of the 1990 Census, which indicate that 14% people of this neighborhood commute to work.[10]

The response rate to the question asking for reasons for not using the bus is on the low side. This is likely due to the wording of the question: most respondents may have interpreted it as pertaining only to those who *never* use the bus. Still, the figures do have some significance: the largest group of non-riders (36%) simply does not consider it necessary. Some claimed that it did not fit with their place of work because they worked in the suburbs or in St. Paul, and that buses lack convenient routes going to such areas. Those citing the 'Other' category offered reasons such as 'children', 'working at home', and 'fear of crime on the bus'.
Totals add up to more than 100% because more than one response was allowed.

Table 3

Bus use and purpose

Respondents were asked which bus they use most often, and for what purpose. Answers to the latter question contained more than one option, and therefore the total adds up to more than 100%.

[10] See Appendix 3 for Census data

QUESTION/ ISSUE	RESPONDENTS	PERCENTAGE
Which bus		
Total	310	100
no. 4	250	80.7
no. 23	29	9.4
Express bus	41	13.2
University bus	18	5.8
Purpose		
Total	324	100
Work	179	55.3
School	32	9.9
Shopping	99	30.6
Doctor/dental	54	16.7
Other	93	28.8

More than half the riders (55.3%) use it to get to work and about one third (30.6%) use it for shopping. Overwhelmingly, the most-used bus route in this neighborhood is the no. 4 bus (80.7%). 'Other' purposes included 'going out at night', 'visiting friends' and 'running errands downtown'.

Table 4

Ease of access to transit facilities

In an attempt to determine some of the more common problems related to transit use, respondents were asked about the convenience and availability of transit related facilities: updated schedules, bus stops and shelters, and bus passes.

QUESTION/ISSUE	RESPONDENTS	PERCENTAGE
Updated schedules		
Total	385	100
Yes	309	80.3
No	76	19.7
Source of schedules		
Total	325	100
Buses	232	71.4
Local shops	68	20.9
Elsewhere	85	26.2
Bus pass use		
Total	399	100
Yes	147	36.8
No	252	63.2

It would appear from the answers above that there is not much of a problem obtaining schedules; even those seldom using the bus acknowledged that they did have access to schedules: a total of 80.3% of respondents. It is significant however that a large majority of riders (71%) get schedules

from the bus itself, and far less from other sources (such as the MT outlet and the Public Library). It may indicate a lack of availability of schedules at sources other than buses.

Table 5
Other related transit information and resources

Questions were asked on the convenience of bus stops and shelters, and the availability of information on bus promotions as well as alternative forms of transport.

QUESTION/ ISSUE	RESPONDENTS	PERCENTAGE
Convenience of Shelters and stops		
Total	386	100
Yes	368	95.3
No	18	4.7
Knowledge of promotions		
Total	382	100
Yes	70	18.3
No	312	81.7
Knowledge of alternative transport		
Total	294	100
Yes	192	65.3
No	100	44.7

In this neighborhood, there is apparently no problem with the location and placement of bus stops and shelters, as 95.3% confirmed the ease of access. This would confirm to some extent the earlier answer to the reasons for not using the bus; where only 3.3% respondents had said it was 'not convenient to home'. There seems however, little knowledge of promotions and services offered by MT. Only 18.3% claimed to know of any promotions, but most of these could not name any promotion in the space provided.

Responses on knowledge of alternative transport are high (65.3%) although this could quite possibly have been distorted by the fact that there was an example of alternative transportation contained (as a prompt) in the question itself[11].

General Survey Comments

It is pertinent also to cite the range of opinions that were given to the last question asking about the factors if any, that would encourage people to use more transit facilities.

A number of people cited the general inconvenience of using the bus: infrequent service, slow speed, most routes require transfers.

[11] See Appendix 1

There was a general concern over the lack of safety of using the bus. Some respondents referred to dangerous or unsafe situations in which they had been involved while riding the bus or waiting for it.

Bus Drivers Interviews

Drivers on route no. 4 buses that pass through the neighborhood were interviewed at MT garages, in groups as well as individually. An informal, conversational style of interview (loosely structured around the categories below) was adopted and drivers were simply asked to give their views on bus ridership based on their experience.

Their views are considered an important contribution to the issue of bus ridership, as they are the MT staff with the most sustained and continuous daily contact with commuters. This experience and exposure gives them a vantage point to observe the behavior and the diverse opinions of riders. The most frequently stated opinions offered by these drivers are paraphrased below. A total of 12 drivers, varying in length of experience and service with MT, were interviewed.

Types of riders

The morning run has mostly people going to work. They don't obtain transfers, meaning that they intend to terminate their journey downtown. Mid-morning traffic changes to a different category. These passengers are older; younger ones tend to be at school or at work at this time. Older people tend to get on and off around Bryant Ave., the Walker Center and the Southwest Seniors' Center. The early evening rush is again full of the younger professional people, and this dissipates around mid-evening. After dark, around 7 o'clock or so, there is a conspicuous thinning of the older crowd, and most of the evening and late night riders tend to be "generation x'ers", younger people going downtown and other areas, for a night out. Elderly people tend not to use the bus at this time.

Factors inhibiting ridership

Two main factors influence ridership: speed and safety. With many stops and frequent transfers, the ride becomes uncomfortable and time-consuming. Too many stops, not enough bus lanes, infrequent bus service, all contribute to longer and more tedious journeys. Recent changes have led to a tightening up in the schedule and forces a very quick 'turnaround time', putting pressure on the driver to drive faster.

Safety is a very important consideration in choosing to take the bus. At present there is no real guarantee of safety while waiting for the bus, or even while riding on it especially at night.

The public needs to be educated on ridership; at present there is little spread of schedules or other information on bus service. There should be more information on promotions and other special offers put out by the transit authority. Information should be put up in neighborhood shop windows and other places which are convenient to people using these services.

The fare structure needs to be rationalized. At peak time, it goes up to $1.50, and inhibits commuters from taking the bus at that time. That seems illogical: increasing fares at a time when it is most important to get people out of their own cars and into the bus. It should remain $1 at all times, or increase to $1.50 at all times.

Maintenance of buses is quite poor and there are frequent breakdowns. The ride is uncomfortable: air-conditioning and heating is unregulated and beyond the driver's control, seats are sometimes not bolted down securely to the bus, leading to accidents with children.

Ways to improve ridership

The bottom line is better service on the ground. This would be achieved by better speed. For the no. 4 bus, it means one stop per block through the neighborhood (where you have to stop anyway because of the stop signs everywhere), but fewer when on Lyndale Avenue, so that the bus can 'shoot' downtown. People want to get there in a hurry and don't want to stop at every block.

There should be more law-enforcement officers on buses, so that they can prevent crimes before they happen and act swiftly to control an incident before it gets out of hand. A driver usually left all alone to deal with difficult or even criminal-minded people on the bus. Having more bus shelters may increase the feeling of safety, though it can have the opposite effect by making a person feel trapped inside.

Maintenance is a 'big' issue, and this should be improved in order to provide better service and more efficient buses for people to ride in.

Metro Transit Non-Rider Survey

MT has conducted focus groups of people identifying themselves as non-riders. This is intended to elicit views on what makes the bus a non-popular form of transport, and also perhaps to determine what could be done in order to improve service delivery by MT. Some of the main views are summarized below.

The inconvenience of public transport

The main perception of the public according to this group is that buses are seen to be a time consuming and inefficient mode of transport. It a private motor car is available, people would readily use it rather than wait around for public transportation. The norm in Minneapolis, as opposed to other large cities, is that people use their cars and tend to ride alone. There is not much support of public transport here. People are willing to bear the costs of their car, the gas and the maintenance, to avoid having to use public transport.

Where some sort of service is available, there are many barriers to riding comfortably. Transfers are frequently needed, and there is seldom a route that is direct from home to the work place. Many people want to avoid the erratic scheduling of buses. Buses don't operate often enough, and this is also an inconvenience, because it interferes with domestic work and personal schedules. Buses stop running at night, and are therefore not a reliable means of getting home late night.

Positive comments

Having someone else do the driving can also be beneficial, for it allows the rider to relax, take a nap, do some reading and just enjoy the ride to work, school or shopping. It also saves the wear and tear on the car. It is sometimes a way of catching up with local gossip on the way to work or home.

Some ideas

If there is an increase in the number of buses, and if fewer transfers were required, there may be fewer problems or inconvenience. Commuters want more direct service, and this would call for more service between suburbs and into the downtown areas. More express lanes on major roads and freeways would speed up the bus. There are some who look forward to different, alternative types of service such as light rail, a theater bus, bike paths, and so on.

Information systems about routes and trips are presently not very helpful. There are no effective visual aids that tell people exactly where and how to get around. Present arrangements are inadequate; when calling MT for information, there is almost always a long wait. Faxes-on-demand, PC's (Internet) and other means of communication would be easier and friendlier forms of obtaining such information. There should be more information available at public places such as Malls, where one could have interactive technology to assist people in planning their trips. Information at bus stops is insufficient. There should be more information on bus passes and their availability. It would be helpful to have information more clearly displayed at bus stops and along routes, as well as on buses themselves.

Cleanliness of the bus and courtesy of transit staff are both important factors. The perception of safety on a bus is essential. Presently many avoid buses for fear that something unpleasant may happen to them. There is additional fear that something may happen while they are waiting at a bus stop or elsewhere.

More convenience services at 'Park and Ride' lots would be beneficial since it would enable more people to use bus service. It would make several things possible there such as shopping, etc. and would increase the tendency to use the bus more.

The issue of crime and disorder

Crime has been mentioned many times as a chief concern of people contemplating riding on a bus. What is the level of crime on the metro services at present?

An internal Metro Transit survey provides the following crime statistics on all routes[12]:

	JUNE 1996	JUNE 1997	JAN-SEPT 1996	JAN-SEPT 1997	% CHANGE 1996-1997
Total Reported Incidents	700	615	4856	4037	-17%
Violent Incidents on Board	22	16	101	104	+3%
Physical Assault on Drivers	9	4	31	23	-26%
Transit Police Arrests	34	20	219	163	-26%

[12] Separate figures for the no. 4 route were not available

The information indicates significant decreases in almost every type of reported incident over the past year. Only the category "violent incidents on board" shows a slight increase (3%). The MT does speculate that the probable cause of the decrease is due to increased police vigilance and control.

The most common ones are those involving sleepers and/ or drunks, who have to be ejected from the bus.

MULTI-MODAL STRATEGY IN THE NIEHGBORHOOD

Results of the residents' survey show that although bus riding is significantly more popular in this neighborhood than in the city as a whole, it is still not a primary form of transportation. MT could take active steps to increase ridership, to make bus ridership a significant part of the neighborhood. It may help to promote a multi-modal strategy in the neighborhood so as to encourage other means of transport that would have beneficial spillover effects on bus ridership. Additionally, it would have the effect of helping the cause of traffic calming in the area, as more people take to biking, car pooling and shuttling and also walking as a mans of getting around.

There are important links between different types and modes of transport that can be effectively exploited and promoted for mutual benefit by the MT as well as by the neighborhood. Walking and biking can contribute to increased bus ridership, as they could be complementary means of transport. The addition of bike racks to the front of buses, as has been done with the University buses, and indeed with the public transport systems in other cities, can be a significant improvement for bus service. Encouraging the idea of getting people to bike to the bus stop, riding the bus downtown or another major junction, and then getting off and biking again.

To increase the visibility of public mass transit, there are ways of encouraging some of the alternative transport forms that can replace private single occupancy vehicles. Some ideas in this direction:

Creation of bus and bike lanes on the major roads in the neighborhood. This would involve the active participation of the City Planning Office, which would have the final say in the planning and the implementation of these lanes.

Provision of bike racks at strategic places, such as park entrances, busy shopping and business areas, churches and schools and so on. The transportation committee of the Neighborhood Association has already approved one rack and is planning to have it installed soon. The committee needs to identify further spots that could be conducive to encourage riders in and out of the neighborhood.

Carpooling efforts could be encouraged on a block or neighborhood wide effort.

SUMMARY OF THE ISSUES

The main focus of this study is on the livability and the safety of neighborhood streets, with increased use of public and shared alternative forms of transport. From the foregoing surveys and other information, the issues and their possible resolution can be summarized:

Increasing bus ridership and encouraging alternative transport forms.

This can be framed as the need to lessen dependence on private single occupancy vehicles. Bus ridership can be therefore combined with the study of alternative means of transport such as bicycling, car-pooling, walking, and so on.

EHFNA has looked at the following ideas and solutions. Their successful implementation depends on the willingness of residents affected by this and other issues, as well as the cooperation of the mass transit authorities. Most of the proposed solutions will require the direct involvement of both groups.

- Ensuring involvement of local businesses to make the neighborhood more accommodating to different forms of public transport, such as buses. Businesses could make constructive contributions in this effort, including but not being limited to: assisting in the relocation of bus stops and shelters, assisting in the sale of bus passes, supplying the neighborhood with up to date schedules and other bus related information, and subsidizing bus passes for employees. They could also join MT's 'adopt a shelter' program.
- Collaborating with MT on the marketing possibilities of making bus transport easier, more user friendly and more accessible for customers. This could be achieved by better advertising of schedules, routes, etc. increasing awareness and knowledge of their offers and promotions, such as value and saver bus passes, special offers, free rides to fairs and festivals, and other such promotion ideas which would increase ridership. A member of the Neighborhood Association could be asked to volunteer training time with MT in order to educate residents on bus use in the area.
- Working with Metro Commuter Services (MCS) to ensure the availability of information alternative forms of transportation presently offered: Park and Ride, carpooling and others. Much of this information is available only to businesses and their employees, and not to other individuals who may wish to make use of it. Perhaps better ways of marketing this information need to be found.
- Studying ways to improve traffic calming and improved road safety: traffic circles, redesigned pavements, narrower roads, pedestrian-only walkways, traffic bumps and other commonly used techniques. Parking for private vehicles could be made more restricted, thereby encouraging the use of alternative means of transport. This is deemed especially necessary on Dupont Ave. South.
- Initiating a block-by-block initiative to encourage people to consider public transport. This could include the creation of local car-pool initiatives and programs. It could include a dial-a-ride service.
- Creating an environment conducive to the use and spread of alternative forms of transport. The neighborhood may want to work with the City Planning staff on the provision of bike only lanes on the major roads: such as Lyndale, Bryant and other parallel avenues that form the major arteries through this neighborhood. The link between bike riding and bus transport is a well documented, and could be encouraged by providing bike racks near the main bus stops.

Walker Health Center

Addressing the transportation and parking problems created by the Walker Health Center, with its two complexes is a critical issue. Presently the available parking facilities are inadequate for employees, so they constrained to use the street - mainly Bryant Avenue, as well as the side streets. The inconvenience of this to residents as well as to employees is exacerbated in winter

when parking is restricted to one side of the street only. Alternatives must be found to reduce inconvenience for area residents and the visitors and employees of the Health Center.

Present facilities and their capacity

The Health Center consists of two separate building complexes. Walker Place and Walker Center, at the same location but with different transportation purposes and needs. WP is a home for the elderly, housing at present about 300 residents. At present it has adequate parking facilities for its residents and for the many visitors it receives throughout the day: residents use a 100 space underground garage, and visitors have access to a parking lot at the entrance to the building, which has a capacity of 20 vehicles. This situation does not create any hindrances or obstruction for the residents of the area.

Walker Center (WC) however is a nursing home and health clinic and has far more erratic traffic volumes: at certain times during the day, the area around it can be totally inundated with visitors and patients. The existing space at the WC is clearly inadequate for the present requirements, and needs planning to help it keep up with the continuously increasing demand for space that the management anticipates in the years ahead. The parking problem can be particularly acute in the winter, when parking is limited.

The WC has conducted a survey of its employees on transportation issues, and has made the results available for this report. Of the approximately 700 employees, a total of 119 took the survey. Of the respondents, almost all (103) drive to work, and of these, only 43 manage to find parking space in the garage, the rest (59 of this survey) have to make do with the existing parking facilities on the street. If these figures were projected to the entire workforce, it translates into a considerable parking problem on the streets where the center is located.

Some Proposals

The WHC management is keen to help solve the existing traffic problem, both for the ease and convenience of its employees, and for the benefit of the community within which it is located. Its security and planning services have made some proposals that may help ease the situation somewhat:

The center presently assists employees who commute to work by subsidizing their travel arrangements. There is a 10% subsidy on bus passes provided by MT and used by employees. This subsidized cost is deducted directly from the individual's payroll. Management proposes to offer its present users a further 10% subsidy, making commuting a little more affordable for them. This would amount to 20% off the regular monthly pass price. This would reward present users and attract other employees to the arrangement. The figures for the use of this subsidized facility however are not encouraging: at present only about 10% of the employees participate in this, though it may rise if there is a further subsidy on the bus pass.

The management proposes a shuttle service for its employees. In the survey referred to above, employees were posed a question about it, and 58% responded that they would utilize such a service if it were to be offered. This would require the use of a building or a parking lot some distance away from the neighborhood, in a central area easily accessible by employees, which could be used as a central point and the origin of the shuttle service to the center. Shuttles would operate every 15 minutes, and take employees to work in the morning and back to the lot in the evening after work. This would allow employees to retain the option of driving to work in their own cars, if they do not find commuting by public transit to be convenient.

It has proposed a pilot program to begin in the fall. The Lutheran Bethlehem Church on 46th St. is to be used as a shuttling point. Its viability will be tested through the season before its formal incorporation in the budget for the next financial year, in March.

Lyndale Avenue redesign

A report completed by the City of Minneapolis in 1996 has proposed making Lyndale Ave a more pedestrian friendly environment, and to introduce some features of traffic calming already implemented in some city neighborhoods.

This would include pedestrian crosswalks, decorative lighting, landscaping to give it a more harmonious appearance. The street itself may become narrower in places, slowing traffic flow, and cutting volume. Greater emphasis placed on turning lanes, to facilitate left and right turns off Lyndale. Increased parking space on both sides of the street, which would make it less conducive to large traffic flows.

Such proposals, while enhancing the beauty and livability of this street, could put more pressure on parallel streets such as Aldrich and Bryant avenues. Motorists could see them as alternative routes to the destination north or south of the neighborhood. This possibility may have to be taken into consideration in the future planning of the EHFNA street system.

CONCLUSIONS AND RECOMMENDATIONS

Surveys and literature research have given much information that is useful for the promotion of the issues in this project. Much of what is contained in the survey of residents, survey of non-riders and the focus groups with bus drivers tends to corroborate the information contained in other instruments used in this report. Some of the main ideas that have been expressed can be summarized below:

Actions by EHFNA

Bus ridership

- Recruit volunteer(s) to help educate and inform public about available transit resources and facilities
- Arrange for tie-ins with local stores to give bus riders discounts on their products
- Help Metro Transit distribute updated information, such as schedules
- Promote Metro Transit services in the regular neighborhood newsletter
- Support the creation of bus lanes on major streets

Promoting alternative transportation

- Install bike racks at convenient spots in the area
- Coordinate the activities of a bike riding club and encourage creation of a downtown bike commuters group
- Encourage car pools by including information on car pooling services through its regular newsletter
- Sponsor 'bike and transit to work' days, which encourage people to use bikes and transit more often (successfully used by Seward NRP)
- Sponsor and support bicycle safety classes (Seward NRP)
- Encourage the creation of bike lanes on major streets

Actions by Metro Transit

- Construct more bus shelters
- Install bike racks at the front of buses to facilitate bike riders
- Coordinate promotion campaigns with other Neighborhood Associations
- Ensure better dissemination of schedules and routes by:

1. Using local businesses more extensively to carry bus passes and service information
2. Equipping *all* bus stops with route maps and bus schedules
3. Creating posters and prominent information displays at shop windows, parks and notice boards
4. Putting up a 'bus booth' or 'bus stall' at local festivals and fairs

Actions by City of Minneapolis

- Creation of additional bike and bus routes in the neighborhoods to supplement existing facilities

- Traffic calming aimed at discouraging through traffic and encouraging pedestrian-friendly environment
- Support alternatives to the auto as a complement to the efforts to increase bus ridership. Biking and walking should be complementary to transit, not competitive.

Walker Health Center

Recommendations of the WHC and the transportation committee

The proposals for their solution:

- The use of the Bethlehem Lutheran Church as a site for shuttling services so that employees may drive to it and be picked up for work at the WHC
- Increase subsidy of the bus passes already subsidized by MT for employees who prefer to commute to work by bus

Redesign of Lyndale Avenue

Impact on the neighborhood

The true impact is as yet unknown, as the repair and redesign has just begun and is expected to take several years. Due to the emphasis on the traffic calming measures to be implemented on Lyndale Avenue, it is possible that motorists may seek alternative routes on adjacent streets, namely Aldrich and Bryant Avenues, and possibly other parallel streets in the neighborhood.

It may be pertinent therefore to build into the neighborhood streets some features of traffic calming in the future. This needs further scrutiny by the City of Minneapolis.

Appendix 1

Questionnaire sent out to EHFNA residents

Please circle the appropriate responses and add comments in the spaces provided.

1. Do you own or rent your residence?
a. Own b. Rent

2. Do you have access to a car?
a. Yes b. No

3. How often do you use the bus?

a. Never
b. Every day or nearly every day
c. Several times a week
d. Once a week
e. Several times a month
f. Once a month or less

4. IF NEVER: why do you not use a bus?

a. It is not necessary
b. It is not convenient to your home
c. It is not convenient to the office
d. Does not work with your schedule
e. Lack of information about bus schedules
f. Other _____

5. Which bus do you most often use?
a. No. 4 c. The Express bus
b. No. 23 d. No. 52 (Univ. bus)

6. Which do you use the bus for?
a. Work c. Shopping
b. School d. Doctor or dental appointments
e. Other _____

7. Do you have access to updated bus routes and schedules?

a. Yes b. No

8. Where do you get bus schedules?
a. From buses
b. From local shops
c. Elsewhere _____

9. Do you ever use a bus pass?
a. Yes b. No
Which one?_____

10. Are bus stops and shelters conveniently located for your use?
a. Yes b. No

11. Do you know of any promotions to encourage bus riding?
a. Yes b. No Which ones?_____

12. Are you aware of alternative transport programs to get to work (rideshare, etc.)?
_____

13. What would encourage you to use the bus more frequently?

_____

_____

14. What traffic problems do you see happening in your neighborhood? For each problem, please indicate the location and any recommendations you have for solving the problem.

Problem	Location	Recommendation
_____	_____	_____
_____	_____	_____

Thank you very much for your help with the survey!

Name: _____
Address: _____
Phone: _____

Appendix 2

Increasing bus ridership: some successful US examples

Studies show that with some innovation, it is possible to create short-term economic incentives by making mutually profitable alliances between bus companies and private entrepreneurs and corporations. These alliances can provide benefits to the consumer who is a client of both the private corporation and the transit authority. Incentives could include free meals, discounts on popular household brands of products and other things popular with most households and therefore useful for the client.

Some examples of efforts made in the US[13]

Portland, OE. Tie in with McDonalds, for an incentive to increase the sale of passes. Commuters received a coupon good for two sandwiches for the price of one, with the purchase of each bus pass and its presentation at a participating restaurant. This was promoted by radio spots and on-bus signs.

Chicago, IL. Riders to shopping areas could present a transit transfer to a participating store, and get tokens in exchange. These tokens allowed a discount for certain retail purchases.

Spokane, WA. A mid-day rider program was created. Passengers using services during the day would get a special ticket. That ticket was redeemable for discounts at participating stores.

Bridgeport, CT. Persons purchasing a ten pack of tokens received discount coupons worth $5 or more. The greater the value of the token pack, the higher the value of discount tokens. Coupons were redeemable at participating stores.

Des Moines, IA. To encourage off peak riding, there was a promotion with a local radio station. Buses would be intercepted by a radio van, and everyone on board would receive a prize, ranging from the cost of a hamburger to $10 coupons. This was done at random, and thus every bus had an even chance of being intercepted.

Duluth, MN. A contest was held among schools. Ridership coupons were issued to students through their schools to be turned into the driver every time a student rode on the bus. The school with the greatest ridership during a one-month period won a "rock night", which featured dance contests, prizes and refreshments.

[13] 'Managing Transit Ridership', UMTA Technical Assistance Program, 1982.

Appendix 3

Select information from the 1990 census

URBAN AND RURAL RESIDENCE	
Total population	3,972
EDUCATIONAL ATTAINMENT	
Persons 25 years and over	3,152
Less than 9th grade	170
9th to 12th grade, no diploma	207
High school graduate	512
Some college, no degree	617
Associates degree	189
Bachelor's degree	992
Graduate or professional degree	465
Percent high school graduate or higher	88.0
Percent bachelor's degree or higher	46.2
COMMUTING TO WORK	
Workers 16 years and over	2,129
Percent drove alone	68.4
Percent in carpools	8.9
Percent using public transportation	14.0
Percent using other means	0.4
Percent walked or worked at home	7.7
Mean travel time to work (minutes)	19.7
VEHICLES AVAILABLE	
Total housing units	1,736
Occupied housing units	1,701
None	282
1	650
2	634
3 or more	135
INCOME IN 1989	
Households	1,722
Median household income (dollars)	34,833
Families	785
Median family income (dollars)	49,375
Nonfamily households	937
Median nonfamily household income (dollars)	24,421
Per capita income (dollars)	21,496

Appendix 4

The real costs of driving[14]

Studies have been conducted to determine the costs that driving imposes on society. Some, the *market costs*, are borne partly by motorists, but the greatest number, the *external costs* are borne by all of society, and not reflected in the market costs.

A summary estimate of market costs not borne by drivers is calculated as shown below. Costs of these items are either subsidized by employers (as with parking) or collected by Federal or State taxes levied on the entire population.

Services that require Government expenditures	Costs not borne directly by drivers*
Highway Construction and Repair	$ 13.3
Highway Maintenance	$ 7.9
Highway Services (Police, Fire, etc.)	$ 68.0
Value of Free Parking	$ 85.0
TOTAL	$ 174.2

* in billions of 1989 dollars

Source: "The Going Rate: What it really costs to drive", World Resources Institute, 1992.

In addition to these fees borne by non-drivers and drivers alike, there are immense external costs of driving, some of which are identified:

- The costs of vehicular air pollution, which are hard to determine exactly, because they include such elusive damages as illness, premature death and reduced crop yields; but even at the low estimate of $10 billion a year, they are substantial, and all of them are borne by society at large
- Since about half of oil consumed in the US is imported, the cost of maintaining a US military presence in the Middle East (up to $50 billion a year) could be considered part of driving costs
- Accounting for about 25% of US carbon dioxide emissions, transportation also increases the risk of climate change. The range of possible consequences of a warmer world is so wide and uncertain that estimating the costs is impossible but everyone will pay in some measure
- There are other incalculable costs of driving, such as the 47,000 people killed in motor vehicle accidents in a recent year (1988)

Studies propose policy changes needed to lower this toll and ensure the development of a balanced transportation system. A number of measures are suggested in the study conducted by the World Resources Institute. Some are summarized here:

- . enacting fuel taxes that would raise the cost of gasoline
- levying road tolls based on the time of day
- reforming employer-paid parking
- raising charges on truckers
- long-term changes in zoning laws to encourage greater residential population density to make public transit a more viable option.

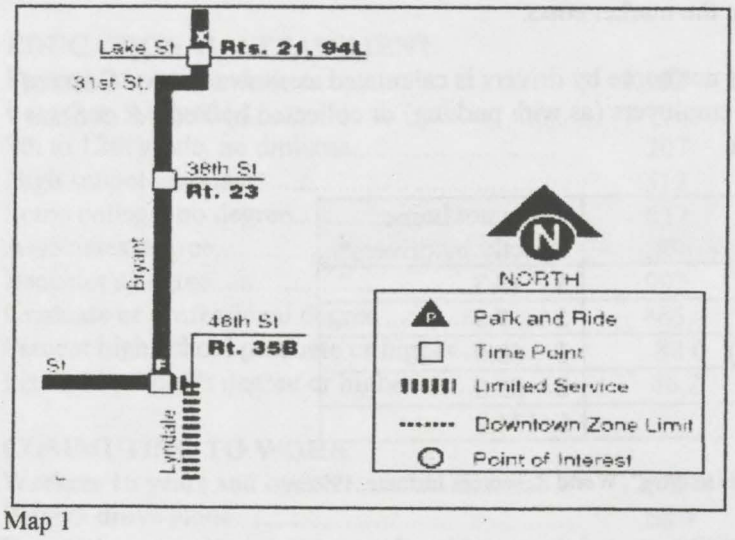
[14] Exerpted from 'The Going Rate: What it really costs to drive', World Resources Institute, 1992.

Appendix 5

Present Transit Options in the East Harriet area

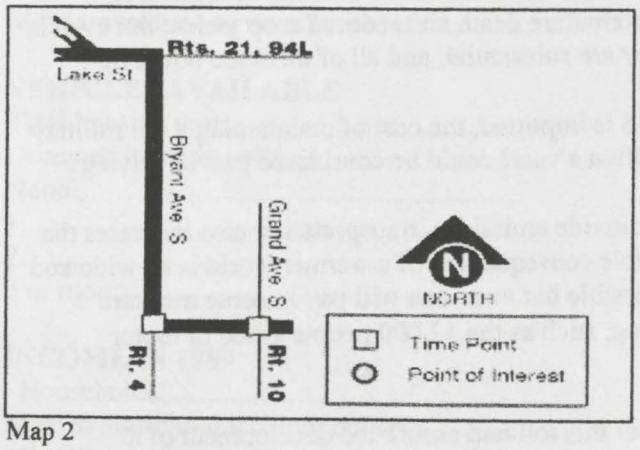
Metro Transit routes

Map showing the no. 4 route as it passes through the neighborhood.



Map 1

Map 2 below shows the bus route no. 23 as it passes through the neighborhood.



Map 2

Besides these services, neighborhood residents have fairly convenient access to University bus 52, as well as Express bus 32.

Commuting Assistance Programs

There are several different promotions and programs available to commuters who use the services of Metro Transit. Some of the features are intended to increase the level of public participation in services provided by MT, creating some degree of responsibility among the public of better delivery of commuting service. The marketing department states them as follows:

Bus passes/ Frequent Rider Program. Metro Transit offers a multitude of bus passes, available at several outlets throughout the metro area. These include Super Saver 31-day passes allowing unlimited travel during that period, and stored value passes. In their 'Frequent Rider Program', MT gives out special benefits and offers to commuters using bus passes. Details can be obtained from MT offices at 373-3333 or at any of the outlet locations.

Adopt a shelter program: metro Transit invites local businesses and homeowners to "adopt" a shelter in their vicinity. The adopter is to look after the maintenance of the shelter, and is responsible for obtaining updated maps and schedules for it.

Telephonic trip assistance: There is a service, in the process of expansion and updating that is offered for commuters. Commuters can call in (373-3333) with their origin of journey and their final destination, and will be given precise directions of the bus to take and the changes and transfers to make for the completion of the journey.

Free rides and discounted rates for special functions and festivals: Events such as the State Fair, the Aquatennial, local Art Fairs (as the one at Uptown) are assisted in by MT providing special services and routes and buses to allow people to get there in time and conveniently.

Metro Commuter Services (MCS) provides several different service options such as carpools and vanpools, the 'guaranteed ride home', and the 'Park and Ride' option, to ease commuting for residents of the metro area. MCS has developed information packages targeting businesses and their employees in the metro area. Their contact number is: 349-RIDE.

REFERENCES AND RESOURCES

People and Institutions

Prof. David Rafter – Humphrey Institute of Public Affairs and Mankato State University
Kris Nelson – Center for Urban and Regional Affairs, University of Minnesota
John Levin – Metro Transit
Mike Monahan – Minneapolis Traffic Engineering Office
Jim Macchitelli – Metro Transit
John Dillery – Metro Transit
William Magratten – Metro Commuter Services
Minnesota Dept. of Transportation
Minnesota Center for Survey Research
GIS Print Room – Metropolitan Council

Books and publications

Appleyard, B., 'Livable Streets', University of California Press, Berkeley, 1981.

Hanson, S., ed. 'The Geography of Urban Transportation', Guilford Press, New York, 1995.

'The Going Rate: What it really Costs to Drive', World Resources Institute, 1992.